

No. 667,271.

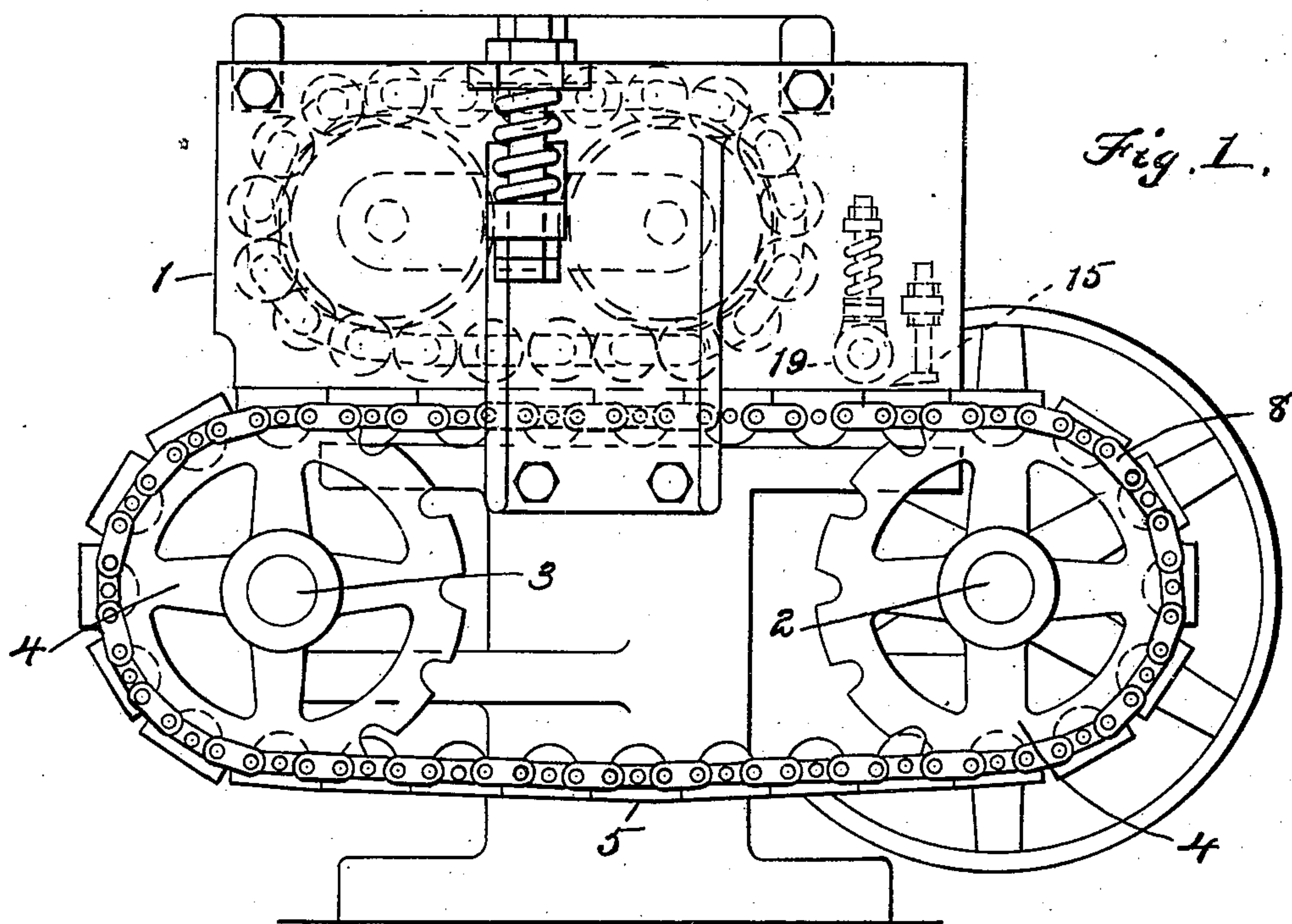
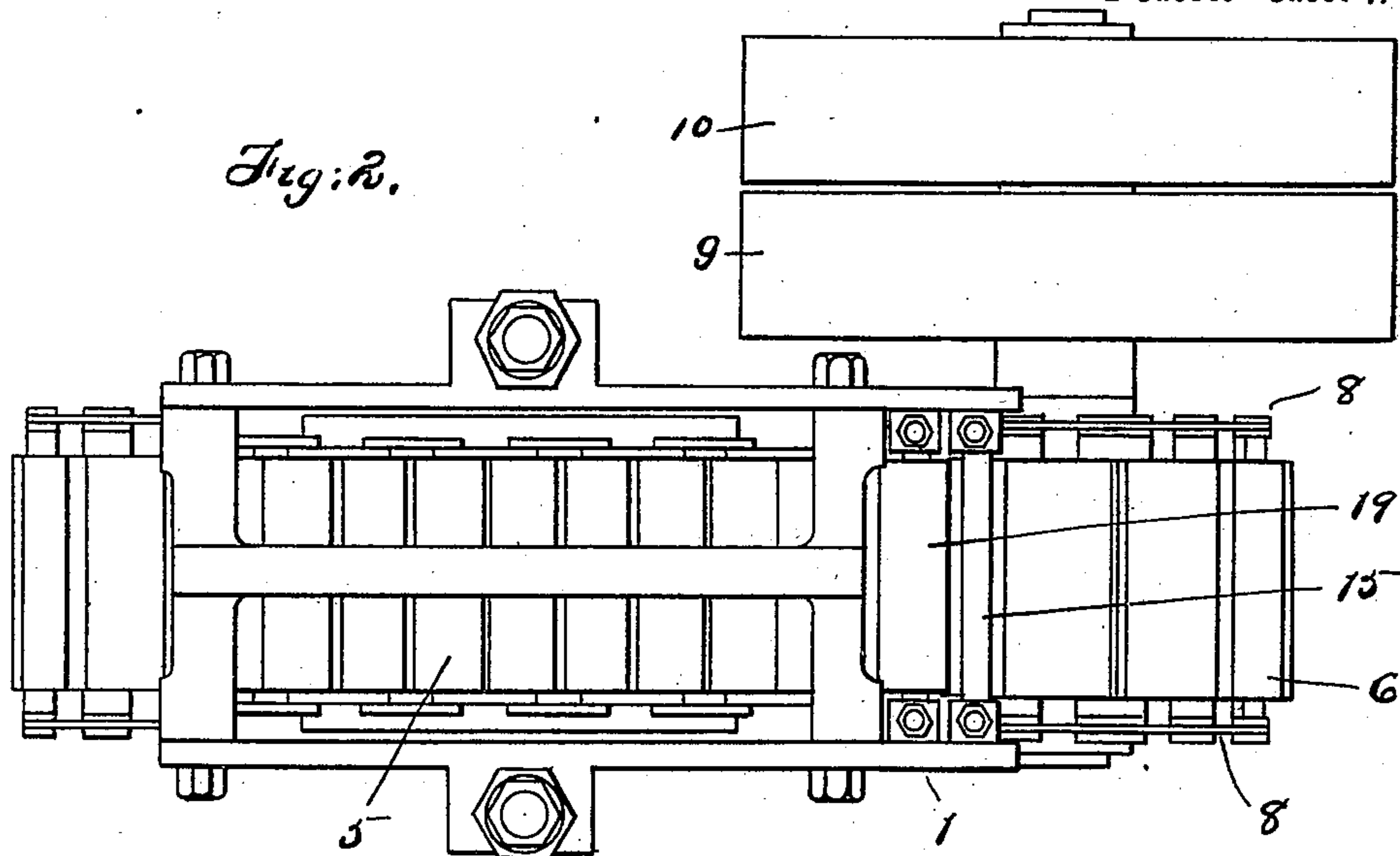
Patented Feb. 5, 1901.

H. A. WEBSTER.
LEATHER SPLITTING MACHINE.

(Application filed Apr. 26, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES.

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(Application filed Apr. 26, 1900.)

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2 Sheets—Sheet 2.

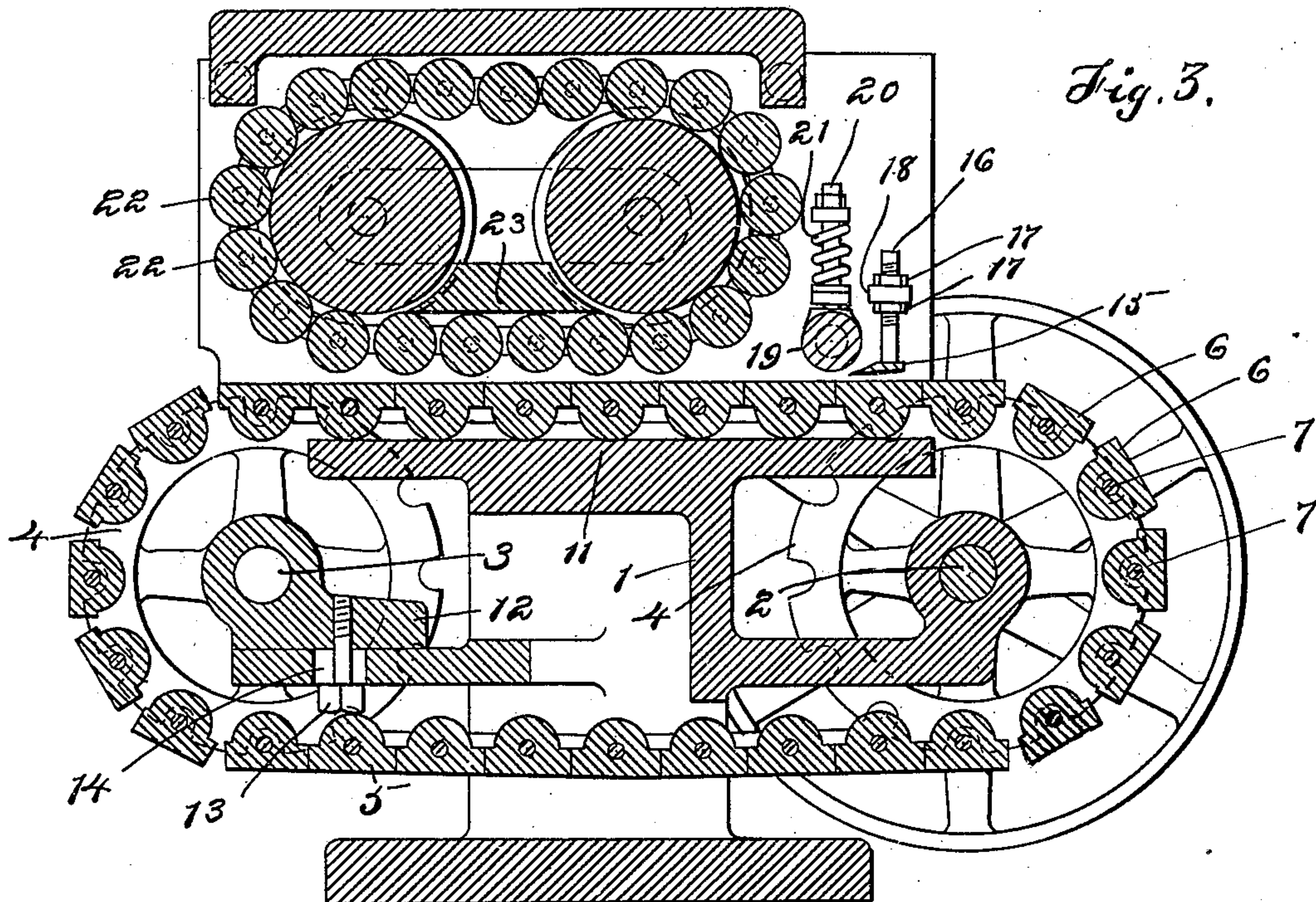


Fig. 3.

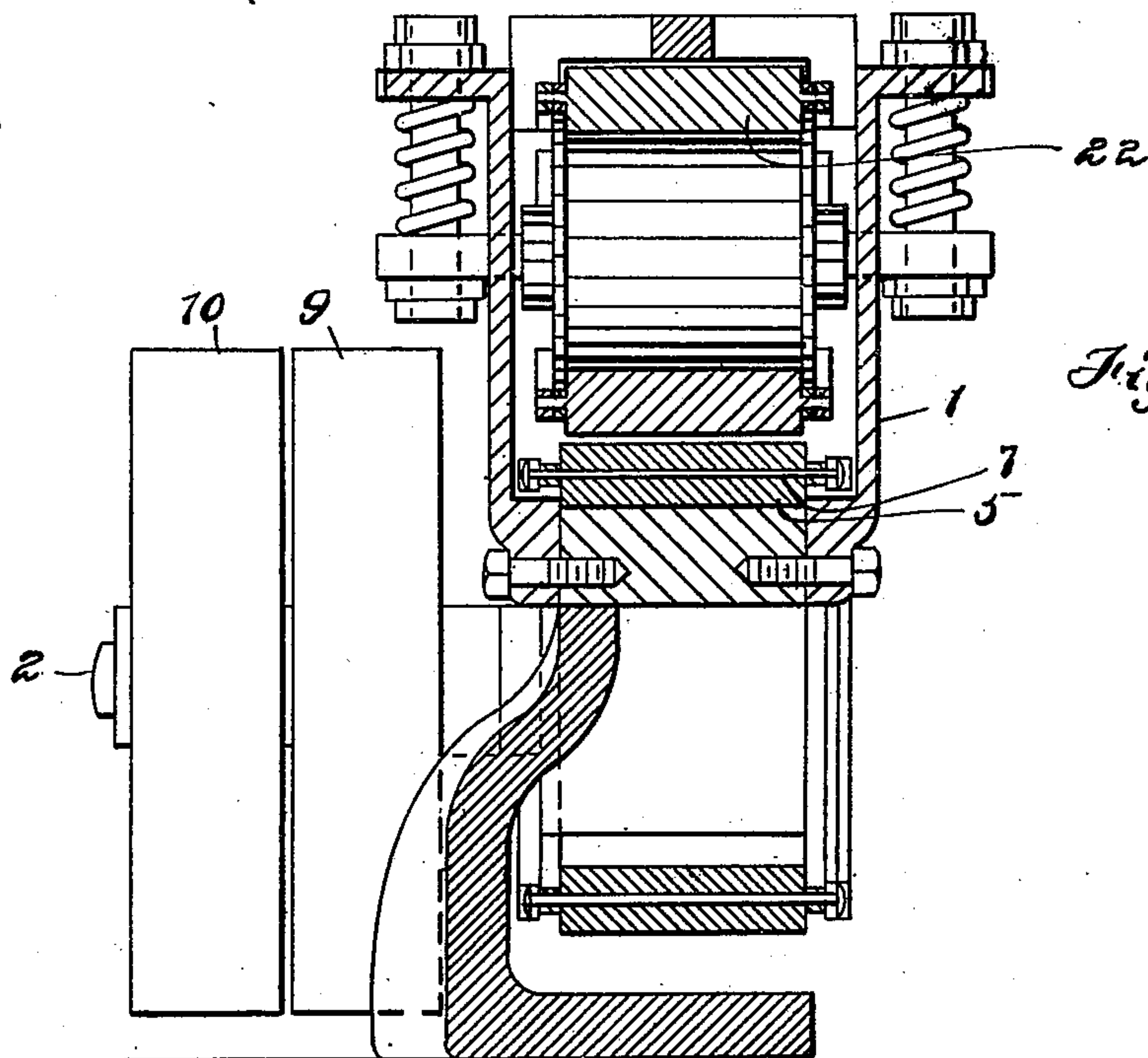


Fig. 4.

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UNITED STATES PATENT OFFICE.

HAROLD A. WEBSTER, OF HAVERHILL, MASSACHUSETTS, ASSIGNOR OF
ONE-HALF TO HERBERT B. NEWTON, OF SAME PLACE.

LEATHER-SPLITTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 667,271, dated February 5, 1901.

Application filed April 26, 1900. Serial No. 14,419. (No model.)

To all whom it may concern:

Be it known that I, HAROLD A. WEBSTER, of Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Leather-Splitting Machines, of which the following is a specification.

This invention relates to leather splitting or skiving machines; and it consists in an improvement involving the use of an endless traveling conveyer or carrier, in combination with a skiving or splitting knife supported above said carrier, together with means for propelling the carrier, so as to feed the leather against the skiving-knife and also to support it underneath the skiving-knife.

The invention further involves the use of a presser-roll in such a machine located in close proximity to the cutting edge of the skiving-knife.

Of the accompanying drawings, Figure 1 represents a side elevation of a leather-splitting machine constructed in accordance with my invention. Fig. 2 represents a plan view thereof. Fig. 3 represents a longitudinal vertical section. Fig. 4 represents a transverse vertical section.

The same reference characters indicate the same parts in all the figures.

In the drawings, 1 designates a suitable frame having bearings for two shafts 2 3, on each of which are mounted a pair of sprocket-wheels 4 4, and on one of which, as the shaft 2, are mounted suitable fast and loose pulleys 9 10 for rotating said shaft.

5 represents an endless traveling apron or carrier composed of a series of flat-topped lags or sections 6 6, mounted upon cross-rods 7 7, which are connected by two chains 8 8, and the ends of which are adapted to lodge between the teeth of the sprocket-wheels 4. The revolution of the shaft 2 propels the apron or carrier 5, and the manner of mounting said apron on the sprocket-wheels causes the carrier to assume the shape represented in Fig. 3—that is, with two approximately parallel horizontal stretches. The upper stretch or operative portion of the carrier is supported by a flat horizontal table portion 11 of the frame 1, and its upper surface presents a continuous unbroken flat surface

upon which the leather is supported. Adjustment of the carrier to take up slack may permissibly be effected, as shown in Fig. 3, by mounting the shaft 3 in a movable bearing 12, adjustably secured to the frame 1 by a bolt 13 passing through a slot 14 in said frame.

15 represents a skiving or splitting knife mounted in a fixed position above the upper surface of carrier 5 and extending transversely across said carrier. The carrier is adapted to feed the leather against said knife by frictional engagement with the leather, and thus cause the leather to be split or skived, the thickness of the underskived layer being regulated by the distance of the knife 15 from the upper surface of the carrier. This distance may be varied in a suitable manner, as by providing the ends of the knife 15 with vertical screw-threaded stems 16, having adjusting-nuts 17 17, located on either side of fixed lugs 18, which project from the sides of the machine-frame.

19 is a presser-roll mounted above the carrier 5, parallel to the knife 15, and located in close proximity to the cutting edge of said knife, the object of said roll being to hold the leather closely against the surface of the carrier as it is fed against the knife. The roll 19 is held in vertically-movable bearings having guiding-stems 20 and yieldingly projected in the direction of the carrier by springs 21. It will be seen that the leather is supported by the carrier as it passes beneath the skiving-knife 15 as well as immediately before and after said passage—a result which cannot be attained where feeding-rollers are used to advance the leather to the knife.

Owing to the fact that the endless flexible carrier is positively driven through the medium of the sprocket-wheels, as above described, a piece of leather of the full width of the carrier may be split by means of the knife which extends entirely across the upper stretch of the carrier in fixed position, the yielding presser-roll in close proximity to the cutting edge of the knife holding and properly presenting to the knife the leather which is positively advanced by the carrier.

22 22 represent presser-rolls mounted above the carrier 5 in advance of the skiving-knife

15 and presser-roll 19 and arranged in an endless series, said rolls being idly mounted, so as to be propelled by the advancing material, the operative portion of the series being
5 backed or supported by a rigid surface 23. The effect of the series of rolls 22 is to hold the leather against the surface of the carrier, and thus secure sufficient frictional carrying power and also give the leather a preliminary
10 rolling to remove waves, wrinkles, and other inequalities. I do not, however, herein claim the presser-rolls 22 in combination with the endless conveyer 5, this subject-matter being claimed in another application, Serial No.
15 14,418, filed April 26, 1900.

I claim—

1. In a leather-splitting machine, the combination with an endless flexible carrier adapted to rigidly support and feed a piece
20 of leather, of sprocket-wheels the teeth of which are engaged by projections from said carrier whereby the carrier is positively driven by the sprocket-wheels, an elongated skiving or splitting knife mounted in fixed
25 position above and extending across the upper surface of the carrier and above the rigid

support therefor, and a yielding presser-roll also extending across the carrier and parallel with and in close proximity to the cutting edge of the knife. 30

2. In a leather-splitting machine, the combination with an endless flexible carrier, of sprocket-wheels the teeth of which are engaged by projections from said carrier whereby the carrier is positively driven by the
35 sprocket-wheels, an elongated skiving or splitting knife mounted in fixed position above and extending across the upper surface of the carrier, a yielding presser-roll also extending across the carrier and parallel with and in
40 close proximity to the cutting edge of the knife, and an endless series of presser-rolls above the carrier and arranged to coact with the carrier in positively feeding the leather to the yielding roll and knife. 45

In testimony whereof I have affixed my signature in presence of two witnesses.

HAROLD A. WEBSTER.

Witnesses:

C. F. BROWN,
A. D. HARRISON.